

# 385A & 385C

FPGA Accelerator Cards

## » 8X Peak TFLOPS

Altera Arria 10 FPGAs include thousands of IEEE754-compliant floating-point DSP cores that deliver up to 1.5 TeraFLOPs, and provide best performance per computing Watt

## » 1.8X Bigger FPGA

More FPGA fabric provides more room for additional accelerator functions

## » 33% More Memory Bandwidth

8 GBytes DDR3 memory @ 2133 MT/s



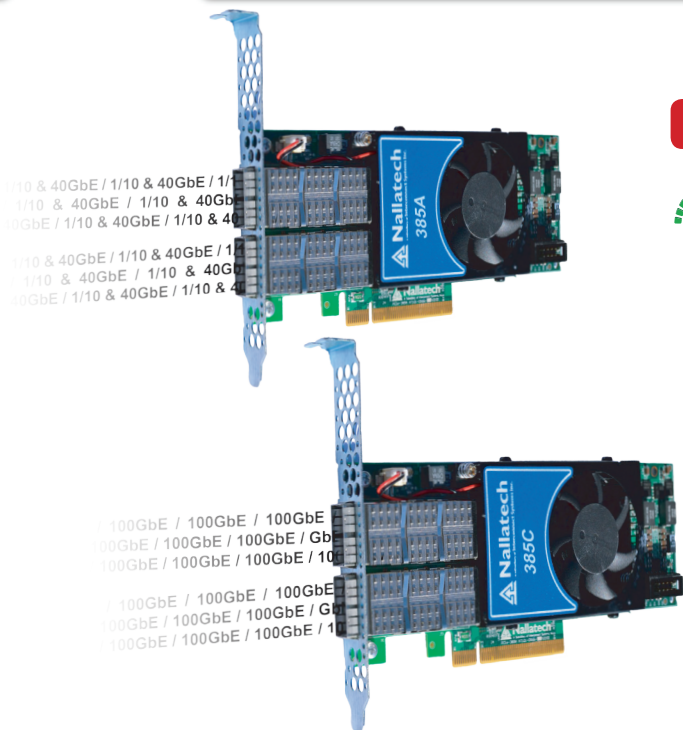
OpenCL



Arria 10



Our Latest Generation FPGA Accelerators  
Offer Drastically Improved Performance



## 385A New Standard in Price Performance



OpenCL

### 4X Network Bandwidth

- » (2) QSFP Ports configurable as:
  - (2) 40GbE QSFP ports (native)
  - (2) 1/10 GbE SFP ports (with adapter)
  - (8) 1/10 GbE ports (with cable)

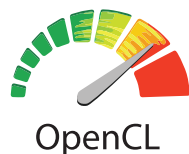
## 385C 100 GbE Network Accelerator 10X Network Bandwidth

- » (2) QSFP Ports configurable as:
  - (2) 100GbE QSFP ports (native)
  - (8) 25 GbE ports (with cable)

The Leader in FPGA  
Accelerated Computing

 **Nallatech**  
a **molex** company

## OpenCL Programmable



Nallatech leads the industry with OpenCL™ programmable FPGA solutions, opening the performance of FPGA computing to Software Engineers

*OpenCL is the first open-source, unified C-based programming model for accelerating algorithms on heterogeneous CPU-GPU FPGA platforms*



The Altera SDK for OpenCL allows the easy implementation of applications onto FPGAs, providing a much faster and higher level software development flow

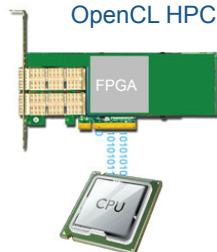
Learn more, visit:  
[www.Altera.com/OpenCL](http://www.Altera.com/OpenCL)



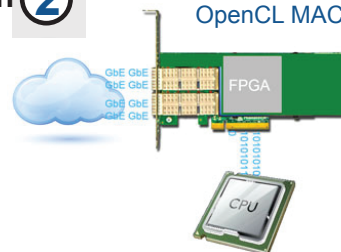
Several Nallatech FPGA Accelerators are available with OpenCL Board Support Packages (BSPs), optimized for Compute and Network acceleration

Learn more, visit:  
[www.Nallatech.com/OpenCL](http://www.Nallatech.com/OpenCL)

### Option 1 Compute Accelerator: OpenCL HPC BSP



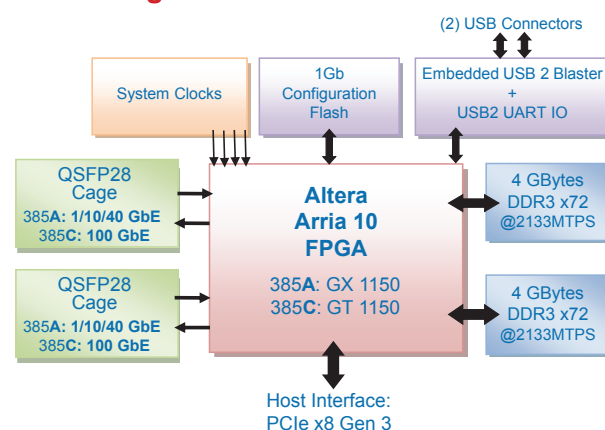
### Option 2 Network Accelerator: OpenCL MAC BSP



## Model Information

Product	385A	385C
Part Number	P385A-115-11A-10	P385C-115-11A-10
Configuration	<ul style="list-style-type: none"> <li>Arria 10 1150 GX FPGA</li> <li>Dual 40G QSFP28 Ports</li> </ul>	<ul style="list-style-type: none"> <li>Arria 10 1150 GT FPGA</li> <li>Dual 100G QSFP28 Ports</li> </ul>
Common Features	<ul style="list-style-type: none"> <li>2 Banks 4G DDR3 SDRAM @ 2133 MTPS</li> <li>PCIe x8 Gen 3</li> <li>Active Cooling</li> <li>1/2 Height, 1/2 Length, Single Width PCIe Card (NIC Size)</li> </ul>	
OpenCL Support	<ul style="list-style-type: none"> <li>HPC BSP (Co-Processor) Included with Card Purchase</li> <li>MAC BSP (Network Enabled) * Available as an Option</li> </ul>	
Options Available	<ul style="list-style-type: none"> <li>Altera Quartus Software Development Kit Edition w/ OpenCL SDK</li> <li>Altera MAC IP</li> <li>QSFP to SFP Adapter</li> </ul>	<ul style="list-style-type: none"> <li>Altera Quartus Software Development Kit Edition</li> </ul>

## Block Diagram



Turnkey Integrated Platforms Available



International Distributors



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